

Remarks and Responses

Claims 1, 2, 4, 5, 11, 12, 14, 17 are amended. Therefore, claims 1-18 remain pending in the present application. In addition, the specification is amended to correct some informalities.

Support for the amendments is found in the specification and claims as filed. Accordingly, the amendments do not constitute the addition of new matter. Reconsideration of the application in view of the foregoing amendments and following comments is respectfully requested.

Claim Rejections - 35 U.S.C. § 112

With respect to paragraph 2, the Office Action rejected claims 1-18 under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.

In response thereto, applicant amended claims 1 and 11 to recite the limitation "at least one network packet having a plurality of data sections corresponding to the local electrical signals".

With respect to paragraphs 3-15, the Office Action rejected claims 1-18 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the application.

In response thereto, applicant has amended claims 1, 2, 4, 5, 11, 12, 14 and 17 to correct the informalities.

Applicant respectfully submits that the Office Action rejection is now overcome.

Claim Rejection - 35 U.S.C. § 103

With respect to paragraph 16, claims 1, 3, 6-11, 13, and 16-18 are rejected under 35 U.S.C. §103(a) as being unpatentable over *King* (US 2003/0131127) in view of *Voll* (US 2005/0063108). With respect to paragraph 17, claims 2, 4, 12 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over *King* (US 2003/0131127) in view of *Voll* (US 2005/0063108) and further in view of *Shirley* (US 6,567,869). Of the rejected claims, claims 2-10 depend from independent claim 1, and claims 12-18 depend from independent claim 11.

When applying 35 U.S.C. §103, the following tenets of patent law must be adhered to:

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). (MPEP §2143.03 All Claim Limitations Must Be Taught or Suggested)

In claim 1 of the application, a keyboard video mouse (KVM) switch for a plurality of local and remote computers to share a plurality of local manipulating devices is provided. The KVM switch comprises: a plurality of first interfaces, which connect to the local manipulating devices to receive a plurality of local electrical signals; a plurality of second interfaces, which connect to the local computers; a packet encoding device, which generates at least one network packet having a plurality of data sections corresponding to the local electrical signals received by the

first interfaces according to the local electrical signals; a network device, which communicates with a network device of another KVM switch using a network protocol in order to transmit the network packet and to receive a network packet transmitted from said another KVM switch; a packet decoding device, which obtains at least one remote electrical signal from the network packet of said another KVM switch; and a switch device, which transmits the local and remote electrical signals to the second interfaces and the packet encoding device according to a path selection setting..

In paragraph [0033] of *King*, *King* teaches that the video multiplexer 232 receives the video output of each of the host computer 71~78, but fails to disclose that the video multiplexer 232 transmits the local and remote electrical signals to the second interfaces and the packet encoding device according to a path selection setting.

Referring to paragraph [0042] of *Voll*, *Voll* disclose that the data and clock signals are routed directly to a microprocessor 565 where they are multiplexed and coded before being transmitted to circuit 520 via UART 567, but fails to teach that microprocessor 565 can generate at least one network packet having a plurality of data sections corresponding to the local electrical signals received by the first interfaces 560 according to the local electrical signals.

Voll discloses that connector 231 is an RJ-45 connectors (paragraph [0044], line 13) connected to one end of cable (such as CAT 5, paragraph [0032], line 13, FIG.2), but there is no suggestion or teaching in *Voll* that connectors 231 communicate with the network device of another KVM switch.

Voll recites that microprocessor 665 obtains keyboard and mouse data signal bases on the data signal from microprocessor 565 (paragraph [0050]), but fails to

suggest that microprocessor 665 obtains at least one remote electrical signal from the network packet of said another KVM switch.

Moreover, Voll discloses that the differential data signal can be transmitted on the cable (paragraph [0029], line 9), and teaches that signals from microprocessor 665 is a differential data signal rather than the network packet.

In addition, the microprocessor 565 transmits the coded signal by a data protocol (as illustrated in FIG. 5 of Voll), different from the network packet recited in claim 1 of the present application which must follow a network protocol and thus is not a simple and encoded "data packet" as disclosed in Voll.

Further, referring to FIG.1 of *King* and FIGS.2-3 of *Voll*, cable 230, subsystems 210 and 220 of Voll may be used by those skilled in the art to connect between KVM unit 12 and one of host computers 71~78 or between KVM unit 12 and operator control center (OOC) 22 when *King* and *Voll* are combined. However, the combined result still doesn't disclose all features of claim 1 of the application.

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. §103, there must have been some teachings in the prior art to suggest to one skilled in the art that the application would have been obvious. Also, all claim limitations must be taught or suggested in the prior art. *Voll* **lacks any suggestion** that the reference should be modified in a manner required to meet claim 1 of the present application. Therefore, the novel features of claim 1 produce new and unexpected results and hence are unobvious and patentable over the citation references, *King* and *Voll*. In addition, insofar as claims 2-10 depend from independent claim 1, and these claims add further limitations thereto, the 35 U.S.C. §103(a) rejection of the claims 1~10 should be withdrawn as well.

In claim 11 of the present application, a computer switching method for a plurality of local and remote computers to share a plurality of local manipulating devices is provided. The method comprises the steps of: receiving a plurality of local electrical signals transmitted from the local manipulating devices; distributing the local electrical signals in such a way that when path destinations of the local electrical signals are the local computers, the local electrical signals are transmitted to the local computers while when the path destinations of the local electrical signals are the remote computers, at least one network packet having a plurality of data sections corresponding to the local electrical signals is generated; establishing communications among KVM switches using a network protocol in order to transmit the network packet to other KVM switches connected to the remote computers and to receive a network packet transmitted from another KVM switch; obtaining at least one remote electrical signal from the network packet transmitted from said another KVM switch; and transmitting the remote electrical signals to the local computers of their destinations.

King discloses that the connector 20 is a 68 pin SCSI connector (FIG.1, paragraph [0037], lines 13~14), but fails to teach the step of establishing communications among the KVM units 12~13 using a network protocol in order to transmit the network packet to other KVM switches connected to the remote computers and to receive a network packet transmitted from another KVM switch.

VoII recites that coded data signal, multiplexed and coded by microprocessor 565, from data signal and clock signal is generated when the destination of data signal and clock signal is the OCC (paragraphs [0042]; [0050]; [0052], lines 1~7). However, there is no suggestion or teaching in VoII that when the path destinations of the local electrical signals are the remote computers, at least one network packet

having a plurality of data sections corresponding to the local electrical signals is generated.

Voll discloses that microprocessor 665 obtains keyboard and mouse data signals from coded data signal from cable (paragraphs [0042];[0050]). However, Voll fails to suggest the step of obtaining at least one remote electrical signal from the network packet transmitted from said another KVM switch.

Moreover, Voll recites that microprocessor 665 transmits keyboard and mouse data signals to OCC including keyboard and mouse. Rather, Voll fails to teach the step of transmitting the remote electrical signals to the local computers of their destinations.

Further, referring to FIG.15 of Voll, the steps disclosed in Voll do not teach all of the steps in claim 11 of the present application.

It is well-settled law that in order to properly support an obviousness rejection under 35 U.S.C. §103, there must have been some teachings in the prior art to suggest to one skilled in the art that the application would have been obvious. Also, all claim limitations must be taught or suggested in the prior art. Voll **lacks any suggestion** that the reference should be modified in a manner required to meet claim 11 of the present application. Therefore, the novel features of claim 11 produce new and unexpected results and hence are unobvious and patentable over the citation references, *King* and *Voll*. In addition, insofar as claims 12-18 depend from independent claim 11, and these claims add further limitations thereto, the 35 U.S.C. §103(a) rejection of claims 11~18 should be withdrawn as well.

Accordingly, the applicant respectfully submits that claims 1-18 are allowable over the art of record and respectfully requests the 35 U.S.C. §103(a) rejection to be reconsidered and withdrawn.

Conclusions

For all of the above reasons, applicants submit that the specification and claims are now in proper form, and that the claims define patentably over the prior art of record. Therefore applicants respectfully request issuance for this case at the Office Action's earliest convenience.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

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Date: March 6, 2007
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